



**SXP2**  
Passive Preamplifier

**Owners Manual**





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## Introducing the Perreaux Silhouette Series

Designed as a range of high quality, yet affordable modules; the 'Silhouette' series will compliment and enhance your existing system.

Drawing on our extensive knowledge gained from more than a quarter of a century of developing highest quality audio products, the 'Silhouette' concentrates our legendary design and build quality into a compact package without sacrificing performance.

The Perreaux 'Silhouette' series provides performance levels never before seen in its class.

### Key Features

- Reference quality ALPS potentiometer
- Optimal PCB and ground plane layout for increased channel separation and crosstalk performance
- Highest quality fibreglass PCB with minimal internal wiring
- Dual preamplifier outputs
- Line-out connections
- Compact
- Stylish

*The Perreaux "Silhouette" series takes you even closer to the elusive goal of "The Perfect Re-Creation of a Musical Event".*

From all of us at Perreaux Industries Limited, thank you for choosing the Perreaux Silhouette Series SXP2 Passive Preamplifier.



## ii Important Safety Instructions

Note: Please read all instructions carefully before attempting to operate your Perreaux "Silhouette" SXP2 Passive Preamplifier.

**ALWAYS** switch off power to your system before attempting to connect or disconnect cables.

**ALWAYS** disconnect your system from the mains before attempting to clean your unit.

**ALWAYS** keep electrical equipment out of reach of children.

**ALWAYS** unplug sensitive electronic equipment during electrical storms.

**NEVER** disconnect the mains earth from the system.

**NEVER** operate the SXP2 with the cover removed.

**NEVER** use any liquid inside the SXP2.

**NEVER** attempt to repair the SXP2. In the event of a problem, please contact your Perreaux dealer.

**NEVER** expose the SXP2 to extremely high or low temperatures.



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# 1

## Unpacking and Placement

### Unpacking Procedure

The SXP2 is packaged for maximum protection. To open, sit the box upright and cut the reinforced tape at the top of the box. The product can now be removed.

Pull the foam protecting end-caps off either side of the unit and remove the black material covering.

The SXP2 Passive Preamplifier is now unpacked and ready for further installation.

### Note:

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Please retain all packaging material for future transport.

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### Box Contents

- 1 x SXP2 Passive Preamplifier
- 1 x Product manual
- 3 x Performance analysis charts

### Placing Your SXP2

The SXP2 should generally be placed close to your source equipment, thus keeping interconnect cabling between the SXP2 and associated components as short as practical. This will reduce the systems susceptibility to radio frequency interference and the negative effects associated with long cables.

### Ventilation Requirements

The SXP2 is a passive electronic device. Ventilation requirements are not considered an important factor in product placement.

In the event that the SXP2 is to be incorporated into custom cabinetry, please refer to the dimensional information provided in the Physical Dimensions section of the manual (Chapter 12).

If you are like us, the first thing you will want to do is to play your favourite piece of music through your new SXP2 Passive Preamplifier. The following instructions are written to enable you to achieve this as quickly as possible. These are not comprehensive instructions, but are designed to enable you to play music now!

Note: Please take the time to read the SXP2 manual thoroughly as it incorporates many features, which will enhance its operation.

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### **Placement**

The SXP2 is a sensitive passive electronic device and best results will be achieved when placed away from potential interference from other components and electrical devices, for example AC mains cords/outlets, transformers, high power amplifiers, computers, etc.

Place the SXP2 close or near the source or input component in order to make as short a connection as possible.

### **Turn off associated components**

This minimises the potential to damage any other components when connecting your SXP2 into the system.

### **Connect source to SXP2**

Connect the audio output from the source component to the input of your SXP2 Passive Preamplifier. Refer to Chapter 4 for Rear Panel information.

### **Connect SXP2 to power amplifier**

Connect the audio output from your SXP2 Passive Preamplifier to the input of the power amplifier. Refer to Chapter 4 for Rear Panel information.

### **Switch on power amplifier**

Turn on your power amplifier.



**Switch on source component**

Power up your source component and start your favourite recording.

**Turn it up**

Slowly increase the SXP2 volume to achieve a comfortable listening level.

**CONGRATULATIONS!**

Now that you have achieved your first objective, sit back, relax and please read the rest of the manual at your own pace in your favourite armchair whilst sipping a glass of wine. You'll find the whole experience much more pleasurable whilst listening to music.

### 3

## Front Panel Functions

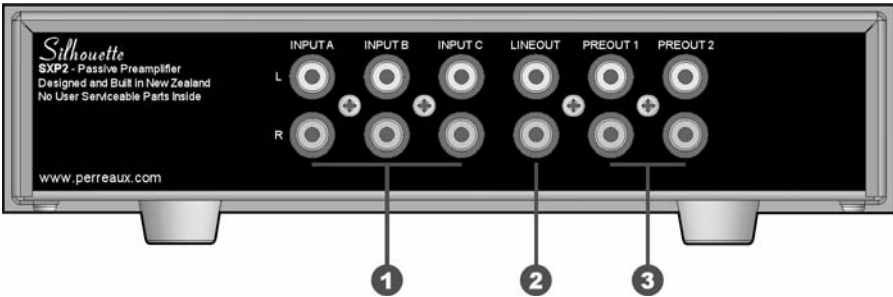


#### **1 Volume Control**

The high-quality, machined aluminium knob reminds the user at every touch of the superior build quality designed into the SXP2. Volume control motion is smooth and accurate, providing absolute control with near infinite gain resolution.

#### **2 Input Selector**

Select one of the three source inputs via the input selector switch.



### 1 Source Inputs

Accepts a standard single-ended input (RCA) from source components with single-ended analogue outputs. These high quality gold plated sockets are highly conductive, corrosion resistant, and provide less potential for corrosion induced distortion.

Refer to Chapter 13 “Specifications”, for detail on input impedance.

### 2 Line Level Outputs

This single-ended (RCA) output will provide a line level audio signal, suitable for recording, from the selected source input. Also useful for bypassing the preamplifier, for example to a headphone amplifier.

### 3 Preamplifier Outputs

These single-ended (RCA) outputs are commonly referred to as “Preouts”. They provide the audio signal required to drive the connected power amplifier(s).

Perreux has been designing and manufacturing only the highest quality audio componentry for more than a quarter of a century. Technology has continued to evolve rapidly over that time and our knowledge and application of design, materials and manufacturing techniques has advanced in tandem with this. Today's Perreux range comes closer to fulfilling our shared vision than at any other time in the past.

The SXP2 has been developed to meet customer demands for compact higher quality products. Careful attention has been taken throughout the development phase, not to make compromises that would degrade the high quality of reproduction that the unit is capable of delivering.

To follow is a discussion on some of Perreux design philosophies that have been incorporated into the entire range.

### **Minimalist Design**

Leading British architect, John Pawson, writes:

*“The Minimum can be defined as the perfection that an object achieves when it is no longer possible to improve it by subtraction. This is the quality that an object has when every component, every detail, and every junction has been reduced or condensed to the essentials. It is the result of the omission of the inessentials”.*

Perreux has historically embraced the minimalist ethic from an audio design perspective only. The concept of “less equating to more” has been at the heart of all Perreux audio designs for more than a quarter of a century. Our current product offering takes the minimalist ethic to new levels by totally embracing the concept.

### **Minimalist Electronics**

We wish to maximise the quality of your listening pleasure by keeping the componentry and signal path as uncluttered, short and clean possible. All components in the signal path, even those of the highest quality have an effect on the signal, thereby altering the quality of the reproduction in some way. Our aim is to recreate in its entirety, the original performance by not adding or subtracting anything, irrespective of the source.

## **Minimalist Aesthetics**

Our products appeal to those who seek the ultimate in audio exclusivity, namely the perfect blend of “form and function”.

“Form and function” are both tough masters. We make no excuses for producing some of the most distinctive high-end audio products on the planet. We let “form and function” blend together in perfect harmony. This surely is the essence of true minimalist utilisation.

## **Minimalism in a Wider Context**

John Pawson writes:

*“Clearly simplicity has dimensions to it that go beyond the purely aesthetic: it can be seen as the reflection of some innate, inner quality, or the pursuit of philosophical or literary insight into the nature of harmony, reason, and truth”.*

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## Special Design Features

### Construction

The SXP2 is stylish and unobtrusive. The front panel is made from high quality solid 6.0mm (0.2”) thick aluminium extrusion featuring our trademark machined Perreaux logo and large volume control knob. These are finished in durable and stylish satin chrome finish electroplate. The chassis and cover are both manufactured from heavy gauge steel. No cover fixing screws are visible. These minimalist styling cues combine seamlessly to allow form and function to blend in harmony and are typical hallmarks of the Perreaux brand.

### Circuit Topology



### Compact

At 216mm (8.5”) wide x 58mm (2.3”) high x 172mm (6.8”) deep the SXP2 is extremely compact.

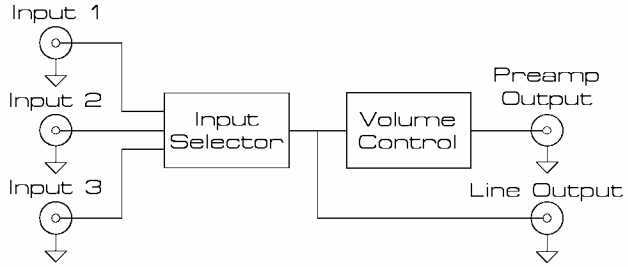
### Signal Ground

Special attention has been paid to ground planes to maintain sonic purity. All signal grounding is optimised to provide a platform for a black background and increased dynamic range.

### Simple control functionality

Front panel features high-quality machined aluminium volume control and input selector knobs. The rear panel comprises gold-plated unbalanced (RCA) line inputs, line outputs and preamplifier outputs.

**Single Channel Block Diagram**



**Ultra Short Signal path**

Careful attention has been paid to the signal path within the preamplifier. It is ultra short, guarded by ground planes where necessary and carefully routed to avoid contamination from external noise sources.

Note:	<p>Never apply liquid directly to the SXP2.</p> <p>Never use abrasives.</p> <p>Never rub in a circular motion.</p>
Cover	<p>The cover features a durable high quality powder coat finish. To remove finger marks and dirt, lightly rub the surface with a soft cloth.</p> <p>If the dirt is not removed, dip your cloth in a mild solution of soap and water, squeeze excess moisture from it and then gently reapply to the surface.</p> <p>Stubborn dirt may be removed by the application of a small quantity of isopropyl alcohol, applied directly to the cleaning cloth only, and reworking the effected area.</p>
Front Panel	<p>The SXP2 front panel features a high quality electroplate finish. Over time the surface may retain finger marks and may need to be cleaned to restore it to original condition.</p> <p><b>Regular Cleaning</b></p> <p>Gently wipe the front panel with a very clean cotton cloth. Wipe across the surface and never in a circular motion.</p> <p><b>Removing Stubborn Marks</b></p> <p>Only attempt this infrequently, as too regular or vigorous application may damage the surface.</p> <p>Apply a small quantity of any car polish containing carnauba wax to a very clean cotton cloth.</p>
Note:	<p>The car polish must state "Safe for Clear Coats" as the polish will therefore contain the absolute minimum amount of abrasive compound.</p> <p>Gently wipe over the front panel in lateral motion, allow to dry then gently wipe off with a very clean cotton cloth.</p>





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## Warranty Information

### **1 Year Limited Warranty**

The Perreaux SXP2 is warranted free from defects in material and workmanship under normal use for a period of 1-year (365 days) from the date of purchase.

To extend the warranty of the Perreaux SXP2 to three (3) years from date of purchase, please return a fully completed warranty registration form along with a copy of the original receipt of purchase to:

Perreaux Industries Ltd  
PO Box 305  
Mosgiel  
Dunedin 9053  
New Zealand

For the Extended Warranty Registration Form, please refer to Chapter 9.

### **3 Year Extended Warranty**

The extended warranty for the Perreaux SXP2 is three (3) years from the date of purchase. If during the warranty period the SXP2 exhibits defects in materials and/or workmanship, it will be repaired or replaced, at our option, without charge for either parts or labour, at our factory in New Zealand. The warranty does not apply to any unit that has been misused, abused or altered.

Any unit that is not performing satisfactorily may be returned to the factory in New Zealand for evaluation. Return authorisation must first be obtained by either calling or writing to Perreaux prior to shipping the unit. Perreaux Industries Ltd and its authorised distributors and dealers shall not be held liable for any freight or insurance charges. Freight and insurance charges to and from the Perreaux factory will be the sole responsibility of the owner of the unit.

There is no other express warranty on the SXP2. Neither this warranty nor any other warranty, express or implied, including any implied warranties of merchantability of fitness, shall extend beyond the warranty period. No responsibility is assumed for any incidental or consequential damages.

### **Obtaining Service**

In the event that you are experiencing difficulty with your SXP2, please as a first step consult the troubleshooting guide in Chapter 10. For further assistance, please contact your Perreaux dealer.



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# Extended Warranty Registration Form

Please complete this form and either fax, mail or e-mail it, along with a copy of the original receipt, to Perreaux Industries Ltd.

Fax: +64 3 489 2976

Mail: Perreaux Industries Ltd  
PO Box 305  
Mosgiel  
Dunedin 9053  
New Zealand

E-mail: info@perreaux.com

Alternatively, complete the online Warranty Registration Form on our website – [www.perreaux.com](http://www.perreaux.com).



## 3 Year Extended Warranty Form



Name:

Address:

Suburb:

City:

Country:

Telephone:

E-mail:

Website:

Product:  S I L H O U E T T E  S X P 2

Serial No:

Dealer:

Purchase Date:  /  /   
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**There is no output from my system**

Please use this guide if you are experiencing any problems with the SXP2 in your system. It will provide possible solutions for some given symptoms.

**Interconnect cables not connected**

Make sure that the input and output interconnect cables are plugged in and are connected to the respective RCA sockets on the rear of the SXP2.

**Source not turned on**

Check that your source component is plugged in to the mains and the power is turned on.

**Source not set to play**

Ensure that your source component is playing the recording you would like to listen to, and that pause is not pressed.

**No volume setting**

Make sure that the volume on your SXP2 is set to a suitable level.

**SXP2 set to incorrect input**

Confirm that the input on your SXP2 is connected to the appropriate source output.

**Loud speakers not connected**

Check that your loud speakers are firmly connected via cables into the binding posts on the rear of the SXP2.

**I can hear a hum coming through my loud speakers****Input sockets and/or output binding posts corroded**

Check that the input and output RCA sockets and binding posts on the rear of the SXP2 are free from corrosion.

**Interconnect cables damaged**

Make sure that the integrity of your interconnect cables is sound and they are firmly connected to your source and the SXP2.

**SXP2 is close to external interference**

Check the proximity of your SXP2 to any possible source of EMI and/or RF interference, for example computers, televisions, amplifiers, speakers, etc. Ideally the SXP2 should be placed as close as possible to your source.

**Specifications  
in Brief**

The correlation between published specifications and sonic quality can be unreliable. A list of numbers reveals virtually nothing. All technical measurements must be subject to qualitative as well as quantitative interpretation. Measurements of the SXP2 reveal excellent results by any standards.

Total Harmonic Distortion ( <i>THD+N</i> ):	
Typically.....	0.001%, @ 1kHz
20Hz to 20kHz.....	<0.002%
Frequency Response:	
20Hz–20kHz.....	+0dB, -0.05dB
5Hz–60kHz.....	+0dB, -0.50dB
Signal to Noise Ratio ( <i>unweighted</i> ):.....	118dB
Crosstalk:	
Channel to Channel.....	-120dB @ 1kHz
.....	-98dB @ 20kHz
Input to Input.....	-120dB @ 1kHz
.....	-97dB @ 20kHz
Channel Tracking:.....	0.50dB
Gain Range:.....	-93dB to 0dB
Input Impedance:	
Typically.....	10kΩ
Potentiometer Type:.....	Audio Log

**Audio Connections**

Inputs.....	3 pairs line level ( <i>RCA</i> )
Outputs.....	2 pairs pre-outs ( <i>RCA</i> )
.....	1 pair line level ( <i>RCA</i> )

**Overall Dimensions**

Width.....	216mm (8.5")
Depth.....	172mm (6.8")
Height.....	58mm (2.3")

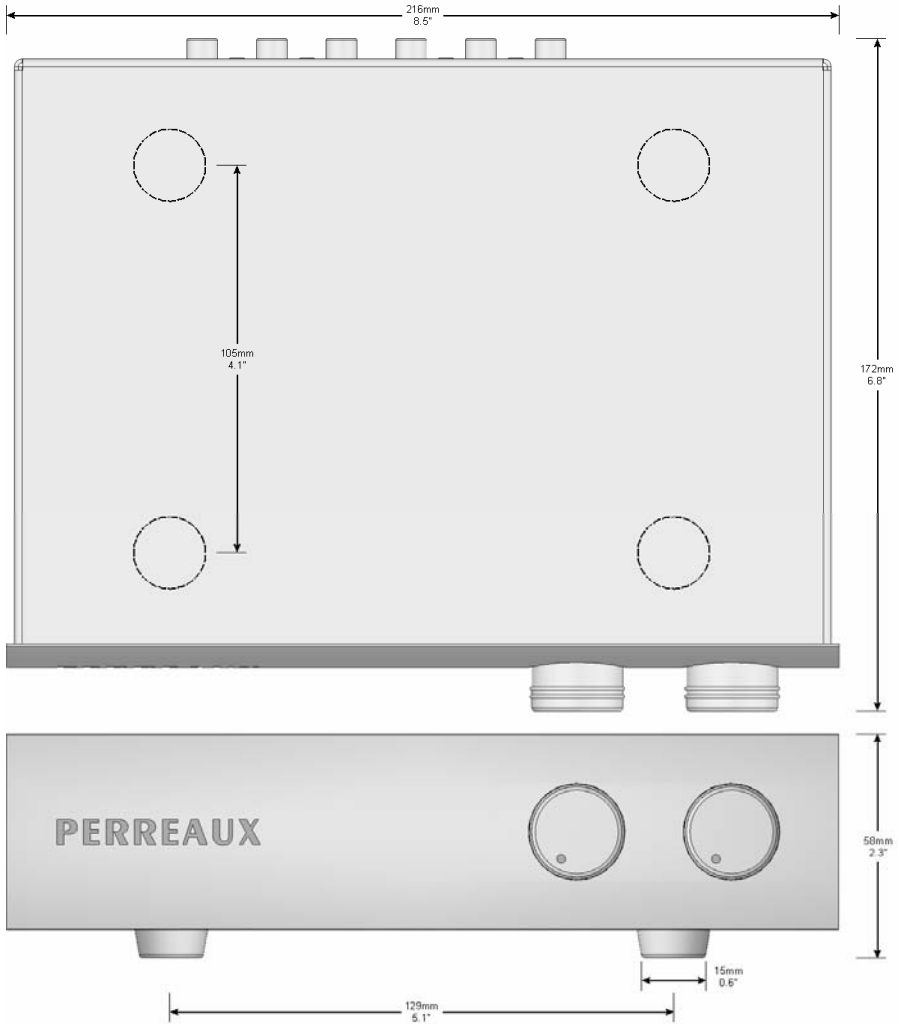
**Weight**

Gross.....	1.7kg (3.7lb)
Net.....	1.1kg (2.4lb)



**Specifications Explained**

THD+N .....	0.001%, @ 1kHz
Total Harmonic Distortion + Noise is the percentage of output signal which is made up of frequencies added due to harmonics of the fundamental frequency and noise.	
Frequency Response.....	20Hz to 20kHz, +0dB -0.05dB
Shows that the amplitude or strength of the output signal deviates by no more than 0.05dB over the entire audio band.	
Signal to Noise Ratio ( <i>unweighted</i> ).....	118dB
The ratio of desired signal to noise signals in the output. Perreux engineers have designed the SXP2 to maintain a low noise floor.	
Crosstalk.....	-120dB @ 1kHz
Crosstalk is caused by stray inductances and capacitances between components and lines, which results in unintentional mixing of stereo signals. Meticulous wire routing ensures excellent high-frequency separation.	
Channel Tracking.....	0.50dB
Channel tracking is the difference in level between the left and right channels. It is worst at the extremities of the potentiometers rotation.	
Gain Range .....	-93dB to 0dB
The range in which the SXP2 can alter the volume level. At the minimum setting the volume level is -93dB, at the maximum setting the level is 0dB.	
Input Impedance.....	10kΩ
The resistance “load” that is presented to the source component that is driving the SXP2.	
Potentiometer Type.....	Audio Log
Potentiometers are available in a range of configurations and fall into two major categories, linear and logarithmic. Audio taper potentiometers are logarithmic and are widely used in audio because the human ear responds on a logarithmic scale.	





For more information please contact your Perreaux dealer, or contact:

Perreaux Industries Ltd  
PO Box 305  
Mosgiel  
Dunedin 9053  
New Zealand

Ph: +64 3 489 2975

Fax: +64 3 489 2976

E-mail: [info@perreaux.com](mailto:info@perreaux.com)

Internet: [www.perreaux.com](http://www.perreaux.com)



## Installation Notes

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